## **Lesson Overview**

Students will learn about the 5 food groups and eating foods from each group to stay healthy. Students will also learn about where food comes from and the difference between whole or processed foods. Fruits and vegetables come in a variety of colors, different colored fruits and vegetables offer different benefits to the body. Keeping the body moving offers other health benefits.



# **Lesson Objectives**

- » Identify MyPlate: vegetables, fruits, grains, protein, and dairy.
- » Understand the importance of eating a variety of fruits and vegetables.
- » Identify where food comes from and how it gets to the farmers market or store.
- » Understand the difference between whole and processed foods.
- » Identify why moving (physical activity) is good for us.

# **Arizona Department of Education (ADE) Academic Standards**

#### **Math Standards**

#### Third Grade

3.NF.1 Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.

#### Fourth Grade

4.NF.1 Explain why a fraction a/b is equivalent to a fraction (nxa) / (nxb) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.



## **English Standards**

#### Third Grade

3.RI.1, 3.RL.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

3.SL.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 3 topics and texts*, building on others' ideas and expressing their own clearly.

c. Ask questions to check understanding of information presented, stay on topic and link their comments to the remarks of others.

#### Fourth Grade

4.RI.1, 4.RL.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

4.SL.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, building on others' ideas and expressing their own clearly.

c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

#### **Physical Education Standards**

**Strand 2** Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.

**Concept 2**: Scientific Principles

PO.1 List physiological indicators of exercise

PO.3 Identify examples of moderate and vigorous physical activity

PO.4 List and define the components of health-related physical fitness

**Strand 6** Values physical activities for health, enjoyment, challenge, self-expression, and/or social interaction.

**Concept 1**: Values Physical Activity



PO.1 Identify at least one enjoyable activity in which he/she regularly participates

# **Advanced Preparation**

- Make sure Powerpoint and projection is set up; bring up PowerPoint Presentation via website.
- ✓ Plan for handouts or possible activity items.

# **Materials and Equipment**

- ✓ MyPlate poster
- ✓ MyPlate handouts (for student)
- ✓ Food Models (optional for demonstration)
- ✓ School Lunch Menu (optional print off from school website for discussion)

## **Incentive Gifts**

- » MyPlate Activity Books
- » MyPlate paper plates
- » MyPlate Pens
- » MyPlate Pencils
- » MyPlate Colored Pencils
- » MyPlate Magnets
- » MyPlate Bookmarks
- » MyPlate Stickers
- » Silly Food Group Eye Glasses
- » Hacky sacks or Frisbees
- » Beach Ball
- » Recipes
- » Fun Food News

Please contact us to see if you are eligible to receive some of these incentive gifts.

## **Estimated Time**

30 minutes for PowerPoint, additional time for the activities.



## **Presentation**

This lesson plan is designed to help assist you and students in making healthy eating choices using the new MyPlate. Below are the notes from each slide within the MyPlate Powerpoint. It is designed to be adaptable for grades 3<sup>rd</sup> through 4<sup>th</sup>, so choose the notes that best match the grade level you teach.

## **Slide #1**

Today we are going to learn about MyPlate! MyPlate shows us the healthy foods to eat so we can be healthy kids!

## Slide #2

Today, class, we will be talking about a few things!

First, we will talk about the different colors of MyPlate and how each one represents a food group. We will talk about vegetables, fruits, grains, protein, and dairy.

Also, we will find out from where our foods come.

Too, we will explain the differences of "whole" foods versus "processed" foods.

We will then discuss what it means to "Eat a Rainbow."

Lastly, we will talk about how moving our bodies (also called physical activity) can make us healthy!

#### Slide #3

- Q.) Has anyone seen this picture before?
- A.) MyPlate shows us how we should be eating each day.
- Q.)What are some things that you notice about it?
- A.) ½ of plate fruits and vegetables!; A variety of foods; Different colors; different/5 food groups; A glass of dairy on the side of the plate... Each colored group represents a group of foods. The colors represent the five food groups.
- Q.) Can you tell me which colors are the largest?
- A.) The plate shows us we need to eat more fruits and vegetables.

On the plate, each color represents a different food group.

Orange – grains



Green - vegetables

Red - fruits

Blue – dairy and calcium rich foods

Purple – protein group which includes meats, beans, fish, nuts and seeds

## Slide #4

First we will start with the vegetable group!

Notice the green group represents vegetables! Vegetables are very important to help keep our bodies' healthy. The darker the color the vegetable the better it is for our bodies. The more colorful the vegetable, the more nutrients it contains.

## Slide #5

There are many different kinds of vegetables!

- Q.) Can you name some vegetables? (hint: look at the picture)
- A.) Potato, carrot, broccoli, eggplant, corn, bell peppers, cabbage, spinach, cauliflower, onion, mushroom, etc.
- Q.) Raise your hand if you have eaten a vegetable today (ask a few kids what vegetable they ate).
- Q.) Can someone tell me their favorite vegetable?
- A.) (Answers will vary.)

Vegetables provide many vitamins and minerals we need for good health. Vitamins and minerals are good things found in food that help to keep our bodies healthy. Vegetables have vitamins A and C. (Ask students if they know what vitamin A is good for...vitamin C.) Vitamin A helps our eyes to see in the dark, and vitamin C helps cuts and bruises to heal and keeps us from getting sick.

Vegetables also contain *antioxidants*. Antioxidants help to protect the cells in our body. They can protect our heart and help lower our chances of getting certain cancers.

## Slide #6

Vegetables come from plants and are grown in large plots of land on farms. They are also grown in community, school, and backyard gardens. Does anyone here have a garden in their backyard? Once the vegetable is harvested (picked) from the garden, it is then sent to the store to be purchased or processed into another food (ex. Tomato turned into ketchup).



Fresh vegetables are found in the *produce section* of the grocery store. Can someone tell me a time they visited the produce section of the grocery store? What did you see there? (Variety of vegetables and fruits, colorful vegetables and fruits, etc.)

Vegetables can also be found at farmers' markets. A farmers' market is a place where farmers get together and sell the vegetables and other foods they grow to consumers. Has anyone here been to a farmers' market before? What do you remember seeing there? (Tables of fresh produce and homemade goods, crafts, etc.)

## Slide #8

Vegetables can be taken from their original form and turned to other food items. A food changed from its original form and turned into another food is called a *processed food*. Can some give me examples of a processed food? (Hint- use the pictures from the slide.)

Examples include tomato juice and ketchup- both originally came from a tomato. Other foods that come from a tomato are tomato sauce and tomato soup. Other examples include potato chips, veggie chips, and French fries.

We should choose whole foods most often. Any whole vegetable or 100% vegetable juice counts! Whole vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated.

## **Slide #9**

Now we will talk about fruits!

The red group represents fruits. Fruit is also very good for keeping our bodies healthy.

#### **Slide #10**

There are many different kinds of fruits!

- Q.) Can someone name a fruit for me? (hint look at the picture)
- A.) Apple, banana, raspberry, pear, plum, kiwi, grapes, orange, watermelon, pear, cherries, etc.
- Q.) Raise your hand if you have eaten a fruit today (ask a few kids what fruit they ate).
- Q.) Can someone tell me their favorite fruit?
- A.) (Answers will vary.)
- Q.) Why is it important for us to eat fruit?



A.) Like vegetables, fruit provides many vitamins and minerals we need for good health. Many of the same vitamins and antioxidants found in vegetables are also in fruit. (Ask the class if they remember the vitamins in vegetables that were discussed, and why vitamins A and C and antioxidants are helpful.)

## **Slide #11**

Fruit grows in many ways. They can grow on trees, oftentimes in what's called an orchard. They can also grow on bushes, vines, and in the ground.

Can you name a fruit that grows on a tree? (apples, oranges, lemons, cherries, peaches.) on bushes? (blackberries, blueberries) On vines and in the ground? (grapes, passion fruit, strawberries, honeydew, watermelon, cantaloupe, pumpkins, etc.)

Once the fruit is harvested (picked), it is then sent to the store to be purchased or processed.

## **Slide #12**

Fruit can be sent to the grocery store and farmers' markets to be purchased, eaten and enjoyed! Like vegetables, fresh fruit is stored in the produce section.

## **Slide #13**

Like vegetables, fruits can be taken from their original form and turned to other food items. Does anyone remember what these foods are called? (Processed foods.)

Can some give me an example of a fruit that is a processed food? (Hint- use the pictures from the slide.)

Again, we should choose whole foods most often. Fruit can be consumed as whole, 100% juice, frozen, canned or dried.

Can someone name a type of dried fruit?

#### **Slide #14**

Fruits and vegetables come in lots of colors! That's why it's important to eat a rainbow of colors of fruits and vegetables! Fruits and vegetables can be red, orange, yellow, green, blue, purple, and white.

Can someone name a red vegetable or fruit?

an orange vegetable or fruit?

a yellow vegetable of fruit?

a green vegetable of fruit?



- a blue vegetable or fruit?
- a purple vegetable or fruit?
- a white vegetable or fruit?

Raise your hand if your favorite color is red. Purple? Blue?

Many red, purple, and blue fruits and vegetables are all good for your brain (have the students point to your brain) and heart (have the students point to their heart.)

Apples, strawberries, and red bell peppers are all examples of red fruits and vegetables.

Eggplant, raisins, purple potatoes and plums are all examples of purple and blue fruits and vegetables.

When you study for a test, red, purple and blue fruits and vegetables will help your brain to think so you can do better in school. They can also help lower the risk of getting certain diseases.

## **Slide #16**

Raise your hand if your favorite color is orange. Yellow?

Many orange and Yellow fruits and vegetables are good for your eyes (have the students point to their eyes) and help keep you from getting sick (have students simulate a sneeze.)

Carrots, pumpkins, and oranges are all examples of orange fruits and vegetables.

Pineapples, apricots, yellow squash are all examples of yellow fruits and vegetables.

When you read a book and/or play games/sports, orange fruits and vegetables will help your eyes to see better. When you are feeling ill, orange and yellow fruits and vegetables help you to feel better. When you fall and scrape your knee, orange and yellow fruits and vegetables help your cuts and bruises to heal. They can also help lower the risk of getting certain diseases.

#### **Slide #17**

Raise your hand if your favorite color is green.

Broccoli, spinach, and kiwi are all examples of green fruits and vegetables.

Some green vegetables help keep your bones (have the students point to their elbow) and teeth healthy (have the students show a smile.)



Leafy green vegetables, such as kale and spinach, help our bones to grow tall and strong. They also help our teeth to be healthy so that we can chew our favorite foods. They can also help lower the risk of getting certain diseases.

## **Slide #18**

Now we will talk about grains!

Notice the orange group represents grains! Grain foods come from plants such as wheat, corn, and oats.

## **Slide #19**

- Q.) Can you name some grain foods?
- A.) Examples of foods from the grain group include bread, rice, cereal, pasta, tortillas, oatmeal, muffins, popcorn, pasta, crackers, etc.
- Q.) Raise your hand if you have eaten a grain today. (Ask a few kids what grain they ate).
- Q.) Why do we need to eat grains?
- A.) These foods will give your body the fuel you need to play, pay attention in school and do many other activities.

## **Slide #20**

Grains are divided into 2 subgroups, Whole Grains and Refined Grains.

Whole grains contain the entire grain kernel — the bran, germ, and endosperm-like shown in the picture here.

The bran is the part that contains the fiber and other vitamins.

The endosperm contains the nutrients that provide us energy.

The germ is loaded with vitamins and other nutrients.

Refined Grains only contain the endosperm. They are missing the bran and germ, therefore missing the nutrients found in these parts.

#### **Slide #21**

Look for the Whole Grain stamp on your grain foods. This stamp indicates the food is made from whole grains. An example of a refined grain versus a whole grain is white and brown rice. White



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rice is a refined grain and brown rice is whole grain. Who here likes brown rice? Other examples include 100% whole wheat bread versus white bread.

## **Slide #22**

Grains are usually grown in large fields. Once the plant is fully grown, farmers will get into their big tractors and cut down these plants.

## **Slide #23**

Once the grains have been cut down, they are sent to a mill. The grain is then ground into flour. The flour is then used to make grain products such as bread, crackers, oatmeal, etc.

## **Slide #24**

Once the grain products have been made, they are sent to the grocery store to be sold. Here is a picture of bread aisle. Raise your hand if you have ever walked down the bread aisle? What do you remember seeing? (loaves of bread, different kids of breads, bagels, etc.)

## **Slide #25**

Just like we discussed with fruits and vegetables, grains can be changed from their original form and made into other food products (processed foods). Foods can be changed a little or a lot. Can someone tell me foods that are processed from grains? (Donuts, muffins, white bread, cereal, crackers, etc.)

The picture here shows a bowl of rice, packaged rice with added flavors, and rice crisps cereal.

#### **Slide #26**

Vegetables, fruit, and grains all provide fiber. Fiber works like a scrub brush cleaning our food tube (digestive tract), keeping our insides healthy! A healthy food tube helps us *make use* of the foods we eat.

#### **Slide #27**

Now we will talk about protein. The protein group can also be considered the Meat and Bean group.

The purple group represents the protein group!

## **Slide #28**

- Q.) Can you name some foods that would be in the Protein or Meat and Bean group?
- A.) fish, beef, chicken, ham, eggs, nuts, peanut (or nut) butter, seeds, beans (such as black, kidney beans, etc.), tofu, etc.

- Q.) Raise your hand if you have eaten a protein food today (ask a few kids what protein food they ate).
- Q.) Why is protein important?
- A.) It helps to make muscle. It is good for our skin and hair. It is also needed for healthy blood.

As mentioned, some examples of protein include meat, eggs, fish, and beans. Meat, such as beef, chicken and pork, come from farms. Chickens lay eggs. Fish are found in bodies of water, like rivers, lakes and oceans.

## **Slide #30**

Beans, such as soybeans and black beans, and some nuts, like peanuts, are grown on a plant. Some other nuts, such as almonds, walnuts and pistachios, are grown on a tree.

## **Slide #31**

Meat can be found in the meat department or deli section of the grocery store. Who here as seen the meat department? Or deli section? What do you remember seeing there? (Variety of meats, a clerk chopping the meat, etc.)

#### **Slide #32**

Protein food can be changed a little or a lot from its original form to make other foods, too. Can someone tell me some protein foods that have been changed from their original form and made into another food? (On the slide is a picture of canned tuna and fish sticks.)

#### **Slide #33**

Now we will talk about the dairy group!

Notice the blue group represents the dairy group! Dairy contains calcium which is important to keep our bones and teeth healthy and strong.

#### **Slide #34**

- Q.) Can you name some foods in the dairy group? (use picture if needed)
- A.) Milk, cheese, cottage cheese, and yogurt. Also, milk substitutes such as almond, rice, and soy milk.



Q.) Raise your hand if you have eaten a dairy food today (ask a few kids what dairy food they ate).

It is important for us to have 3 to 4 servings of foods from the milk and dairy group every day.

- Q.) Why it is important to have 3 to 4 servings of dairy foods every day?
- A.) These foods give us calcium for healthy bones and teeth.

Fat-free or low-fat dairy foods are the healthiest choice. Choose milk cartons that have the word fat-free, skim, or 1% are the better choices. Ice cream is not a low-fat dairy food, and we should only have ice cream once in a while.

## **Slide #35**

Again, fat-free and low-fat milk options are the healthiest. Choose fat-free and low-fat dairy options rather than those that contain higher amounts of fat such as whole milk.

Sometimes people are not able to digest milk. This is called *lactose intolerance*. People who are lactose intolerant may choose to drink milk from other sources than cows such as soy milk, almond milk, rice milk, etc. Has anyone ever tried a milk alternative? These milks can be just as healthy as cows' milk as long as they have calcium and vitamin D added to them.

## **Slide #36**

Dairy products can be changed a little or a lot to make other foods. Can anyone name some processed dairy foods? (This slide shows cheese and ice cream.)

#### **Slide #37**

Cows are first milked. The milk is then sent to a processing plant to be cleaned and bottled or made into other milk products such as cheese, butter, etc. The final products are then sent to the grocery store to be purchased and consumed.

#### **Slide #38**

Has anyone been down the dairy aisle in the grocery store? What do you remember seeing? (Varieties of milk, flavored milk, yogurt, cheeses, etc.)

#### **Slide #39**

Lastly, moving our bodies can make us healthy! Moving our bodies can be called physical activity. It helps our bones and muscles grow stronger, and makes our heart and brain healthier!

Q.) Can someone name an example of kind of physical activity?



- A.) Examples of physical activity include jumping rope, taking a walk, playing on the playground, swimming, etc.
- Q.) What are some of your favorite physical activities?
- A.) (Answers will vary.)
- Q.) How much physical activity do boys and girls your age need to get every day?
- A.) 60 minutes or more. Try to get 60 minutes or more of physical activity all *or* most days of the week.

Physical activity is anything that gets our bodies moving for a certain amount of time. With physical activity, you usually start to breathe faster, sweat more, and your heart starts to beat faster.

Physical activity comes in all forms!

There are three different ways to be physically active:

- 1.) *Aerobic* This means you need oxygen (air). This type makes us breathe the heaviest and makes our heart strong. Some examples of aerobic activity include jogging, dancing, riding bike.
- 2.) *Strengthening* This type of activity gives strength to our bones and muscles. Examples include push-ups, sit ups, and squats.
- 3.) *Stretching* This type of activity helps us to move around better, especially as we get older. Examples include touching our toes or reaching to the sky.

Physical activity can be fun!

#### **Slide #41**

Now it's time for a review the information we just covered!

- Q.) What are the 5 food groups found on MyPlate?
- (A.) Fruit, vegetables, grains, protein, and milk
- (Q.) What does it mean to "Eat a Rainbow"?
- (A.) To "Eat a Rainbow" means to eat a variety of colors of fruits and vegetables. Each color is good for us and provides a health benefit to our bodies!
- (Q.) Name one reason why physical activity is good for us.



- (A.) Physical activity can help our bones and muscles grow stronger. It is also needed to make our hearts healthy! It can also help our brains become healthier!
- (Q.) What are the three types of physical activity?
- (A.) Aerobic, strengthening, and stretching

Thank you for participating in MyPlate for Kids!

Now we will do an activity! (optional)



# **Background information**

You may want to read this section before presenting to give yourself a little more information about the slides and lesson plan.

MyPlate illustrates the five food groups (various colors) that are the building blocks for a healthy diet using a familiar image—a place setting for a meal. Before you eat, think about what goes on your plate or in your cup or bowl. Below is a little more information from each food group.

## Vegetable:

Any vegetable or 100% vegetable juice counts as a member of the Vegetable Group (green group). Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; and may be whole, cut-up, or mashed. Vegetables are organized into 5 subgroups, based on their nutrient content, the darker the vegetable the better.

Eating vegetables is important because they provide vitamins and minerals and most are low in calories. Vegetables are naturally low in fat and calories, none have cholesterol. Vegetables are important sources of many nutrients, dietary fiber, vitamin A, and vitamin C. Vitamin A keeps eyes and skin healthy and helps to protect against infections. Vitamin C helps heal cuts and wounds and keeps teeth and gums healthy. Vitamin C also aids in iron absorption.

#### Fruit:

Any fruit or 100% fruit juice counts as part of the Fruit Group. Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed.

Eating fruit provides health benefits just like vegetables. People who eat more vegetables and fruits as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Fruits provide nutrients vital for health such as dietary fiber, and vitamin C. Most fruits are naturally low in fat, sodium, and calories. None have cholesterol. Vitamin C is important for growth and repair of all body tissues, helps heal cuts and wounds, and keeps teeth and gums healthy.

Discover the many benefits of adding vegetables and fruits to your meals. They are low in fat and calories, while providing fiber and other key nutrients. Most Americans should eat more than 3 cups—and for some, up to 6 cups—of vegetables and fruits each day. Vegetables and fruits don't just add nutrition to meals. They can also add color, flavor, and texture.

**Key message:** Remember; make half your plate fruits and vegetables.

#### Healthy reasons to eat a rainbow of colorful fruits and vegetables

Red fruits and vegetables contain natural plant pigments called "lycopene" or "anthocyanins." Lycopene in tomatoes, watermelon and pink grapefruit, for example, may help reduce risk of



several types of cancer. Anthocyanins in strawberries, raspberries, red grapes and other fruits and vegetables act as powerful antioxidants that protect cells from damage. Antioxidants are linked with keeping our hearts healthy, too.

These are some examples of the red group:

- Red apples
- Beets
- Red cabbage
- Cherries
- Cranberries
- Pink grapefruit
- Red grapes
- Red peppers
- Pomegranates
- Red potatoes
- Radishes
- Raspberries
- Rhubarb
- Strawberries
- Tomatoes
- Watermelon

Orange/yellow fruits and vegetables are usually colored by natural plant pigments called "carotenoids." Beta-carotene in sweet potatoes, pumpkins and carrots is converted to vitamin A, which helps maintain healthy mucous membranes and healthy eyes. Scientists have also reported that carotenoid-rich foods can help reduce risk of cancer, heart disease and can improve immune system function.

Some examples of the orange/yellow group include:

- Yellow apples
- Apricots
- Butternut squash
- Cantaloupe
- Carrots
- Grapefruit
- Lemons
- Mangoes
- Nectarines
- Oranges
- Papayas
- Peaches
- Pears
- Yellow peppers
- Persimmons



- Pineapple
- Pumpkin
- Rutabagas
- Yellow summer or winter squash
- Sweet corn
- Sweet potatoes
- Tangerines
- Yellow tomatoes
- Yellow watermelon

Green fruits and vegetables are colored by natural plant pigment called "chlorophyll." Some members of the green group, including spinach and other dark leafy greens, green peppers, peas, cucumber and celery, contain lutein. Lutein works with another chemical, found in corn, red peppers, oranges, grapes and egg yolks to help keep eyes healthy.

Some leafy greens, like collards and kale, are particularly rich in calcium, which helps keep your teeth and bones strong and reduces your overall risk for osteoporosis. Calcium also contributes to muscle function and blood-pressure management.

Some examples of the green group include:

- Green apples
- Artichokes
- Asparagus
- Avocados
- Green beans
- Broccoli
- Brussels sprouts
- Green cabbage
- Cucumbers
- Green grapes
- Honeydew melon
- Kiwi
- Lettuce
- Limes
- Green onions
- Peas
- Green pepper
- Spinach
- Zucchini

Blue/purple fruits and vegetables are colored by natural plant pigments called "anthocyanins." Anthocyanins in blueberries, grapes and raisins act as powerful antioxidants that protect cells from damage. They may help reduce risk of cancer, stroke and heart disease. Other studies have shown that eating more blueberries is linked with improved memory function and healthy aging.



These are some examples of the blue/purple group:

- Blackberries
- Blueberries
- Eggplant
- Figs
- Juneberries
- Plums
- Prunes
- Purple grapes
- Raisins

#### Grain:

Any food made from wheat, rice, oats, cornmeal, barley or another cereal grain is a grain product. Bread, pasta, oatmeal, breakfast cereals, tortillas, and grits are examples of grain products.

Grains are divided into 2 subgroups, Whole Grains and Refined Grains.

Whole grains contain the entire grain kernel — the bran, germ, and endosperm.

## Examples include:

- whole-wheat flour
- bulgur (cracked wheat)
- oatmeal
- whole cornmeal
- brown rice



Refined grains have been milled, a process that removes the bran and germ. This is done to give grains a finer texture and improve their shelf life, but it also removes dietary fiber, iron, and many B vitamins.

## Some examples of refined grain products are:

- white flour
- de-germed cornmeal
- white bread



#### white rice



Most refined grains are *enriched*. This means certain B vitamins (thiamin, riboflavin, niacin, folic acid) and iron are added back after processing. Fiber is not added back to enriched grains. Check the ingredient list on refined grain products to make sure that the word "enriched" is included in the grain name. Some food products are made from mixtures of whole grains and refined grains.

Consuming whole grains as part of a healthy diet may reduce the risk of heart disease. Consuming foods containing fiber, such as whole grains, as part of a healthy diet, may reduce constipation. Some vitamins found in whole grains play a key role in metabolism – they help the body release energy from protein, fat, and carbohydrates. These vitamins are also essential for a healthy nervous system.

Dietary fiber from whole grains or other foods may help reduce blood cholesterol levels and may lower risk of heart disease, obesity, and type 2 diabetes. Fiber is important for proper bowel function and it helps reduce constipation. Fiber works like a scrub brush cleaning our food tube (digestive tract), keeping our insides healthy! A healthy food tube helps us *make use* of the foods we eat. Fiber-containing foods such as whole grains also help provide a feeling of fullness with fewer calories.

Key Message: Make at least half of your grains whole grains.

#### **Protein:**

Protein foods include both animal (meat, poultry, seafood, and eggs) and plant (beans, peas, soy products, nuts, and seeds) sources. We all need protein—but most Americans eat enough, and some eat more than they need. How much is enough? Most people, ages 9 and older, should eat 5 to 7 ounces\* of protein foods each day.

Proteins function as building blocks for bones, muscles, cartilage, skin, and blood. They are also building blocks for enzymes, hormones, and vitamins. Vitamins found in this food group serve a variety of functions in the body. They help the body release energy, play a vital role in the function of the nervous system, aid in the formation of red blood cells, and help build tissues.



## Dairy:

The Dairy Group includes milk, yogurt, cheese, and fortified soymilk. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not. Calcium-fortified soymilk (soy beverage) is also part of the Dairy Group. Dairy foods provide calcium, vitamin D, potassium, protein, and other nutrients needed for good health throughout life. Choices should be lowfat or fat-free—to cut calories and saturated fat. How much is needed? Older children, teens, and adults need 3 cups\* a day, while children 4 to 8 years old need  $2\frac{1}{2}$  cups, and children 2 to 3 years old need 2 cups.

Calcium is used for building bones and teeth and in maintaining bone mass. Dairy products are the primary source of calcium in American diets. Diets that provide 3 cups or the equivalent of dairy products per day can improve bone mass. The intake of dairy products is especially important to bone health during childhood and adolescence, when bone mass is being built.

Key Message: Switch to fat-free or low-fat (1%) milk.

## **Physical Activity**

Physical activity simply means movement of the body that uses energy. Walking, gardening, briskly pushing a baby stroller, climbing the stairs, playing soccer, or dancing the night away are all good examples of being active. For health benefits, physical activity should be moderate or vigorous intensity.

Children and adolescents should do 60 minutes or more of physical activity each day. Most of the 60 minutes should be either moderate- or vigorous intensity aerobic physical activity, and should include vigorous-intensity physical activity at least 3 days a week. As part of their 60 or more minutes of daily physical activity, children and adolescents should include muscle-strengthening activities, like climbing, at least 3 days a week and bone-strengthening activities, like jumping, at least 3 days a week. Children and adolescents are often active in short bursts of time rather than for sustained periods of time, and these short bursts can add up to meet physical activity needs. Physical activities for children and adolescents should be developmentally-appropriate, fun, and offer variety.

## Being physically active can help you:

- Increase your chances of living longer
- Feel better about yourself
- Decrease your chances of becoming depressed
- Sleep well at night
- Move around more easily
- Have stronger muscles and bones
- Stay at or get to a healthy weight
- Be with friends or meet new people
- Enjoy yourself and have fun



## **References:**

MyPlate: <a href="http://www.choosemyplate.gov/">http://www.choosemyplate.gov/</a>

Fruit and Veggies, More Matters: <a href="http://www.fruitsandveggiesmorematters.org/">http://www.fruitsandveggiesmorematters.org/</a>

# **Activities**

See activities folder for various age appropriate activities.

